TCA Deproteinization Kit

(Cat. # BAQ105, BAQ106, BAQ107)

INTRODUCTION

Proteins may interfere with some assays, affecting accuracy and sensitivity. Chemical alternatives for removal of proteins are better option when ultrafiltration is not possible.

G-Biosciences TCA (trichloro acetic acid) Deproteinization Kit ensures a protein removal efficiency over 99 % with very low sample dilution that includes a neutralizing solution to adjust the pH.

ITEM(S) SUPPLIED

Description	100 samples* (BAQ105)	200 samples (BAQ106)	400 samples (BAQ107)
TCA Solution	1.7 ml	3.4 ml	6.8 ml
TCA Neutralizing Solution	1.2 ml	2.4 ml	4.8 ml

** The number of samples refer to an individual sample with volume of 150 µl with low concentration of protein or 100 µl sample with high concentration of protein.*

STORAGE CONDITIONS

This kit is shipped at ambient temperature. Store all the reagents as indicated on the labels. If stored and used as directed this kit is stable for 12 months.

ADDITIONAL ITEMS REQUIRED

- 1.5ml microfuge tubes

RECOMMENDED USES

For the deproteinization of samples prior to assaying low molecular weight metabolites such as GSH, ATP etc. The precipitated proteins will remain nonfunctional.

PROTOCOL

1. Place the TCA Solutions and Neutralizing solution on ice to ensure they are cold before use.
2. Add sample and TCA in a microfuge tube.
   NOTE: *For samples with high concentration use a 6:1 ratio. For example: 90 µl of sample with 15 µl of TCA Solution. For samples with low protein concentration use a ratio of 10:1. For example: 150 µl of sample with 15 µl of TCA solution.*
3. Briefly vortex to mix.
4. Incubate the tube/tubes on ice for 15 minutes.

5. Centrifuge the tubes at 10,000 g for 10 minutes at 4°C.
6. Collect the supernatant in a fresh microfuge tube and add 10 µl of Neutralizing solution and briefly vortex to mix.
   NOTE: *Vent sample tube as there may be formation of CO2.*
   ***NOTE**: Check that the pH is neutral with a pH paper test. If necessary, adjust with the neutralizing solution.*
7. Place the sample on ice for 5 minutes. Assay the sample immediately or store at -80°C for later use.

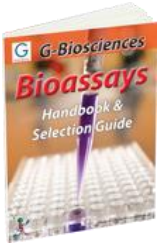
DATA ANALYSIS

The sample is diluted by this process. To calculate the dilution factor, apply the following formula:

$$\% \text{ final sample} = \frac{\text{Initial sample volume}}{\text{Initial sample volume} + \text{Volume of TCA Solution} + \text{Volume of neutralization solution}}$$

RELATED PRODUCTS

Download our Bioassays Handbook.



http://info2.gbiosciences.com/complete-bioassay-handbook

For other related products, visit our website at www.GBiosciences.com or contact us.

www.GBiosciences.com